

The Use and Misuse of Fresh Frozen Plasma: An Analysis of 26,637 Transfusion Recipients

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Introduction

Fresh frozen plasma (FFP) is often transfused unnecessarily and, when transfusion is appropriate, it is frequently administered in less than the accepted therapeutic dose of at least 10 ml/kg (3-4 units for adult patients).

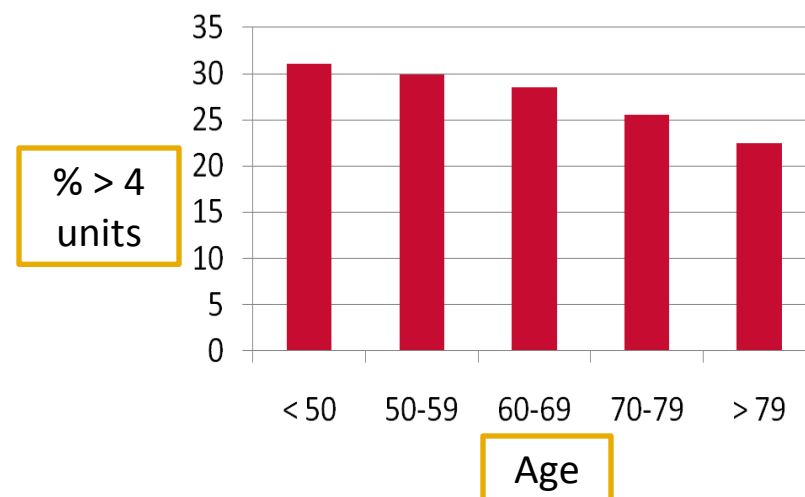
Methods

We analyzed over three years of patient specific transfusion data from 29 US hospitals using the IMPACT[®] Online database (Haemonetics, Braintree, MA). 26,637 patients who received 135,149 units of FFP were identified. Data was analyzed by dosage and by recipient age.

Recipient Age	% of patients
>79	24.8
70-79	25.5
60-69	18.8
50-59	13.4
< 50	17.6

Results

- 56.5% of patients were male
- 50.3% were ≥ 70 years old
- 45.2 % received ≤ 2 units
- 26.7% received > 4 units
- Dose was related to patient age



Units	Patients	%
>10	1790	6.7
9-10	704	2.6
7-8	1676	6.3
5-6	2952	11.1
3-4	7483	28.1
1-2	12032	45.2

Conclusions

- Patients receiving FFP are frequently “under-dosed.”
- Older patients are less likely to receive higher doses than younger patients.
- Further studies are needed to understand FFP transfusion in relation to the clinical indication and the use of laboratory tests as “transfusion triggers.”